Plumbing Board c/o Department of Labor and Industry 443 Lafayette Road North St. Paul, MN 55155-4344 www.dli.mn.gov

# Plumbing Board Request for Action

PRINT IN INK or TYPE

NAME OF SUBMITTER	PURPOSE OF REQUEST (check all that apply): New Code				
Cathy Tran, DLI					
The Minnesota Plumbing Code (MN Rules, Chapter 4714) is	available at www.dli.mn.gov/CCLD/PlumbingCode.asp				
Specify the purpose of the proposal: If recommendation for apply)					
Appurtenance (e.g., water conditioning equipment)  Other (describe)	_ Test Method				
<b>Does your submission contain a Trade Secret?</b> Yes If Yes, mark " <b>TRADE SECRET</b> " prominently on each page of information. Minnesota Statutes, section 13.37, subdivision 1	of your submission that you believe contains trade secret				
"Trade secret information" means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.					

Note that, although "trade secret" information is generally not public, the Board and its committees may disclose "trade secret" information at a public meeting of the Board or committee if reasonably necessary for the Board or committee to conduct the business or agenda item before it (such as your request.) The record of the meeting will be public.

**Describe the proposed change.** The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at http://www.revisor.leg.state.mn.us/arule/4714/

#### NOTE:

- Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish
  your purpose.
- The proposed change, including suggested rule language, should be specific. If modifying existing rule language, underline new words and strike through deleted words. Please list all areas of the Minnesota Plumbing Code that would be affected.

see attached

Office Use Only					
RFA File No.	Date Received by DLI	Dated Received by Committee	Date of Forwarded to Board		
PB0089	4/12/2017				
Title of RFA	Ву:				
Committee Recommendation to t	he Board: Accept Reject	Abstain			
Board approved as submitted:  Yes  No		Board approved as modified: Yes No			
File we to delegate the week and the legatification of the company of the property of the company of the compan					

PB0089 Need and Reasons For the Change. Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal. see attached

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

Please attach electronic scanned copies of any literature, standards and product approvals or listings. Printed or copyrighted materials, along with written permission from the publisher to distribute the materials at meetings, should be sent to the Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.

Primary reason for change: (check only one)		Attachment D
Protect public, health, safety, welfare, or security	☐ Mandated by legislature	PB0089
Lower construction costs	Provide uniform application	
Encourage new methods and materials	Clarify provisions	
☐ Change made at national level ☐ Other (describe)	Situation unique to Minnesota	
Anticipated benefits: (check all that apply)	Dravida mara affordable construction	
<ul><li>✓ Save lives/reduce injuries</li><li>✓ Improve uniform application</li></ul>	<ul><li>Provide more affordable construction</li><li>Provide building property</li></ul>	
Improve health of indoor environment	Drinking water quality protection	
Provide more construction alternatives	Decrease cost of enforcement	
Reduce regulation Other (describe)		
Economic impact: (explain all answers marked "yes")	and of autoroomoust?	If was avalain
Does the proposed change increase or decrease the co	ost of enforcement?	If yes, explain
2. Does the proposed change increase or decrease the co	ost of compliance?  Yes No If y	es, explain
Include the estimated cost increase or decrease, and who		ost decrease:
3. Are there less costly or intrusive methods to achieve the	e proposed change? 🛛 Yes 🔲 No	If yes, explain
4. Were alternative methods considered?  Yes methods were considered and why they were rejected.	No If no, why not? If yes, explain	what alternative
5. If there is a fiscal impact, try to explain any benefit that "N/A."	will offset the cost of the change. If there is no	impact, mark
6. Provide a description of the classes of persons affected benefit.	d by a proposed change, who will bear the cost,	and who will
7. Does the proposed rule affect farming operations? (A Code under Minnesota Statutes, Section 326B.121.)	· -	nnesota Building
Are there any existing Federal Standards?	No If yes, list:	
Are there any differences between the proposed change a	nd existing federal regulations?  Yes N	0
☐ Not applicable ☐ Unknown If yes, describe each diffe	erence & explain why each difference is needed	d & reasonable.
Minnesota Statutes, section 14.127, requires the Board to in the first year after the changes take effect will exceed \$2		
defined as a business (either for profit or nonprofit) with less city with less than ten full-time employees.		
During the first year after the proposed changes go into eff	•	
small city of comply with the change? $\square$ Yes $\square$ No If	fyes, identify by name the small business(es or	small city(ies).

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Will this proposed plumbing code am regulation in order to comply with the pgovernment(s) and ordinances(s) that amendment.	proposed plumbing co	de amendment?	Yes 🔀 No, If y	es, identify b	y name the
Additional supporting documentation r Committee/Board may need to consid			there any additional o	comments yo	u feel the
<ul> <li>Information regarding submitting the Submissions are received and head delay the process, and your process, and your process.</li> <li>Submit any supporting docume states, and engineering data elect has been received, it will be assig supplemental submissions.</li> <li>For copyrighted materials that rapprovals or testing data, listing with written permission from the Plumbing Board, c/o Department</li> <li>For materials that must be submoriginally submitted and reference</li> </ul>	ard by the Committee of posal will be listed a ntation to be considered ronically to DLI.CCLDI ned a file number. Please by agencies (IAPM publisher to distribut of Labor and Industited by U.S. Mail, please publisher to Mail not p	s the date it was ered, such as managered, such as managered, such as managered, such as ereference the compublishers, and a such as ereference the material such as expenses include a second of the compute the material such as expenses include a second of the compute th	as received "Completanufacturer's literature.mn.us. Once your Rais file number on any such as published M, etc.,) you may sells at meetings, via lette Road No., St. Pa	ete." Te, approvals Request For A Y correspond  standards, and just 2 co J.S. Mail to: ul, MN 5515	by other action form ence and product pies, along
<ul> <li>Information for presentation to the</li> <li>Limit presentations to 5 minutes o</li> <li>Be prepared to answer questions</li> </ul>	r less.		nentation.		
Information regarding Committee at  The Plumbing Board or designate		:			
I understand that any action is a recor	nmendation to the Plui	FIRM NAME	d is not to be conside	ered final acti	on.
Cathy Tran NAME, PHONE NUMBER AND E-MAIL A	DDRESS OF PRESENT	DLI ER TO THE COM	MITTEE (if different):		
ADDRESS		CITY		STAT E	ZIP CODE
PHONE	SIGNATURE (original o	r electronic)	DATE		
651/284-5898		· 	April 11, 2017		
For Assistance or questions on completing	this form, contact Cathy	Tran, Departmen	nt of Labor and Industry	at 651-284-58	98.
For Office/Committee Use Only Propo	sal received completed?	Yes No			
	notification (e.g., e-mail)		Proposer: Date	materials re-re	ceived:

<sup>\*\*\*</sup>Please remember to attach all necessary explanations and supporting documentation\*\*\*Page 4 of 4

### 1002.0 Traps Protected by Vent Pipes.

**1002.1 Vent Pipes.** Each plumbing fixture trap, except as otherwise provided in this code, shall be protected against siphonage, backpressure, and air circulation shall be assured throughout the drainage system by means of a vent pipe installed in accordance with the requirements of this code.

**1002.2 Fixture Traps.** Each fixture trap shall have a protecting vent so located that the developed length of the trap arm from the trap weir to the inner edge of the vent shall be within the distance given in Table 1002.2, but in no case less than two times the diameter of the trap arm.

Exception: Emergency floor drains and floor-set fixtures not used as waste receptors installed within 25 feet of a vented branch or main..

SONAR: exception to not require individual vent on emergency floor drains and floor drains not receiving indirect waste piping. This is reasonable and needed as emergency floor drains and drains not receiving indirect waste discharges are unlikely to siphon the trap seals and do not need to be individually vented.

## 1006.0 Floor Drain Traps.

**1006.1 General.** Floor drains shall connect into a trap so constructed that it can be readily cleaned and of a size to serve efficiently the purpose for which it is intended. The drain inlet shall be so located that it is in full view. Where subject to reverse flow of sewage or liquid waste, such drains shall be equipped with an approved backwater valve.

Exception: Floor drains or trench drains which connect to sand interceptors or oily and flammable liquid interceptors need not be trapped.

SONAR: Without this language, the requirement is that all fixtures including floor drains/floor set fixtures or laundry tubs in service garages must be trapped. This creates unsafe installation where oily/flammable wastes are retained in traps as well defeating the purpose of designing a sand interceptor for separation and as sand/dirt/solids filling trap before entering the sand interceptor for separation. Furthermore, if trapped then each fixture requires a vent located near a wall which is difficult in an open space such as a garage.

**1014.2** Hydromechanical Grease Interceptors. Hydromechanical grease interceptors must comply with ASME Standard A112.14.3-2000. Plumbing fixtures or equipment connected to a Type A and B hydromechanical grease interceptor shall discharge through an approved type of vented flow control installed in a readily accessible and visible location. Flow control devices shall be designed and installed so that the total flow through such device or devices shall at no time be greater than the rated flow of the connected grease interceptor. No flow control device having adjustable or removable parts shall be approved. The vented flow control device shall be located such that no system vent shall be between the flow control and the grease interceptor inlet. The vent or air inlet of the flow control device shall connect with the sanitary drainage vent system, as elsewhere required by this code, or shall terminate through the roof of the building, and shall not terminate to the free atmosphere inside the building.

**1016.1 Discharge.** Where the discharge of a fixture or drain contain solids or semi-solids heavier than water that would be harmful to a drainage system or cause a stoppage within the system, the discharge shall be through a sand interceptor. Multiple floor drains shall be permitted to discharge into one sand interceptor.

**1016.2 Authority Having Jurisdiction.** Sand interceptors are required where the Authority Having Jurisdiction deems it advisable to have an sand interceptor to protect the drainage system.

**1016.3 Construction and Size.** Sand interceptors shall be built of brick or concrete, prefabricated coated steel, or other watertight material. The interceptor shall have an interior baffle for full separation of the interceptor into two sections. The outlet pipe shall be the same size as the inlet pipe of the sand interceptor, the minimum being 3 inches (80 mm), and the baffle shall have two openings of the same diameter as the outlet pipe and at the same invert as the outlet pipe. These openings shall be staggered so that there cannot be a straight line flow between the inlet pipe and the outlet pipe. The invert of the inlet pipe shall be no lower than the invert of the outlet pipe.

The sand interceptor shall have a minimum dimension of 2 square feet (0.2 m<sup>2</sup>) for the net free opening of the inlet section and a minimum depth under the invert of the outlet pipe of 2 feet (610 mm).

For each 5 gpm (0.3 L/s) flow or fraction thereof over 20 gpm (1.26 L/s), the area of the sand interceptor inlet section is to be increased by 1 square foot (0.09 m²). The outlet section shall at all times have a minimum area of 50 percent of the inlet section.

The outlet section shall be covered by a solid removable cover, set flush with the finished floor, and the inlet section shall have an open grating, set flush with the finished floor and suitable for the traffic in the area in which it is located.

**1016.4 Separate Use.** Sand and similar interceptors for every solid shall be so designed and located as to be readily accessible for cleaning, shall have a water seal of not less than 6 inches (152 mm), and shall be vented.

Exception: Sand interceptors connecting to oily and flammable liquid interceptors meeting the requirements of Section 1017.0 do not require a water seal.

# 1017.0 Oil and Flammable Liquid Interceptors.

1017.1 Interceptors Required. Repair garages and gasoline stations with grease racks or grease pits, parking garages over 1000 square feet, vehicle wash facilities, and factories that have oily, flammable, or both types of wastes as a result of manufacturing, storage, maintenance, repair, or testing processes, shall be provided with an oil or flammable liquid interceptor that shall be connected to necessary floor drains. The separation or vapor compartment shall be independently vented to the outer air. Where two or more separation or vapor compartments are used, each shall be vented to the outer air or shall be permitted to connect to a header that is installed at a minimum of 6 inches (152 mm) above the spill line of the lowest floor drain and vented independently to the outer air. The minimum size of a flammable vapor vent shall be not less than 2 inches (51 mm), and, where vented through a sidewall, the vent shall be not less than 10 feet (3048 mm) above the adjacent level at an approved location. The interceptor shall be vented on the sewer side and shall not connect to a flammable vapor vent. Oil and flammable interceptors shall be provided with gastight cleanout covers that shall be readily accessible. Drains discharging into interceptors must not be designed to retain liquid wastes. The waste line shall be not less than 3 inches (80 mm) in diameter with a full-size cleanout to grade. Where an interceptor is provided with an overflow, it shall be provided with an overflow line [not less than 2 inches (50 mm) in diameter] to an approved waste oil tank having a minimum capacity of 550 gallons (2082 L) and meeting the requirements of the Authority Having Jurisdiction. The waste oil from the separator shall flow by gravity or shall be pumped to a higher elevation by an automatic pump. Pumps shall be adequately sized and accessible. Waste oil tanks shall have a 2 inch (50 mm) minimum pump-out connection at grade and a 1½ inch (38 mm) minimum vent to atmosphere at an approved location not less than 10 feet (3048 mm) above grade.

**1017.2 Design of Interceptors.** Each manufactured interceptor that is rated shall be stamped or labeled by the manufacturer with an indication of its full discharge rate in gpm (L/s). The full discharge rate to such an interceptor shall be determined at full flow. Each interceptor shall be rated equal to or greater than the incoming flow and shall be provided with an overflow line to an underground tank.

Interceptors not rated by the manufacturer shall have a depth of not less than 2 feet (610 mm) below the invert of the discharge drain. The outlet opening shall have not less than an 18 inch (457 mm) water seal and shall have a minimum capacity as follows: Where not more than three motor vehicles are serviced, stored, or both, interceptors shall have a minimum capacity of 6 cubic feet  $(0.2 \text{ m}^3)$ , and 1 cubic foot  $(0.03 \text{ m}^3)$  of capacity shall be added for each vehicle up to 10 vehicles. Above 10 vehicles, the Authority Having Jurisdiction shall determine the size of the interceptor required. Where vehicles are serviced and not stored, interceptor capacity shall be based on a net capacity of 1 cubic foot  $(0.03 \text{ m}^3)$  for each 100 square feet  $(9.29 \text{ m}^2)$  of surface to be drained into the interceptor, with a minimum of 6 cubic feet  $(0.2 \text{ m}^3)$ .

SONAR: This proposed language coordinates with section 1009.1 and 418.7 of the code. Currently, a flammable/oily waste interceptor must be provided where required by the AHJ under sections 1009.1 and 418.7 require an oil and flammable liquid interceptor shall be provided for parking garage if required by this section (1017) to protect the sewer systems. Furthermore, the proposed language also provides a minimum size garage that must be provided with a flammable waste interceptor when required by the AHJ. Without the proposed language, these sections are not consistently administered among jurisdictions and is subject to approval project by project basis.